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SECURITY INFORMATION

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CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

[redacted]

25X1A

COUNTRY : USSR

DATE DISTR. 3 Apr 52

SUBJECT : Installation Description - State Research Plant #2 (Zavod #2), Kuibyshev, USSR

NO. OF PAGES 11

NO. OF ENCLS. 3 (LISTED BELOW)

PLACE ACQUIRED: [redacted]

DATE ACQUIRED [redacted]

SUPPLEMENT TO REPORT NO.

DATE OF INFORMATION [redacted]

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25X1A

THIS IS UNEVALUATED INFORMATION

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[redacted]

1. Site Layout /Enclosure (A)/

(a) Point 1 New Test Stand Building

The new test stand building was to house three units. Construction of this building was begun in 1946, but it was still not in operation [redacted] 25X1X

25X1X [redacted] The building was made of brick, two stories high, and had a flat roof and an L-shaped test stand tower. It contained general test and assembly rooms and offices for measurement personnel. I am unable to estimate its dimensions.

(b) Point 2 Temporary Test Stand

Built in 1946; a wooden structure, 20x10x8 m, which had a flat roof, covered with tarpaper. Between 20-30 workers and engineers worked there, one shift per day. /For a sketch and description of this test stand, see Report No [redacted] 25X1A

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(c) Point 3 Design and Construction Office

Attached is a sketch of the office building in which I worked /Enclosure (B)/. The building was of brick construction, 40x15x15 m, three stories high, and with a slanted roof. Approximately 300-350 Soviet and German employees worked there, one shift per day.

Ground Floor

Point 1 House administration and paper storage room. The administrator was a former Soviet Major.

Point 2 Drafting room. Soviet girls worked here; the work consisted primarily of copying original drawings.

Point 3 Drawing office. Booklets and perspective designs of units for non-technicians were made by four German employees in this office.

Point 4 I do not remember for what this office was used.

Point 5 and Point 6 Blueprint office. Female Soviet employees worked here, under the supervision of a German engineer, Mr Kercher.

Point 7 Design archive for non-secret material. Six people worked in this archive; two German specialists, two German and two Soviet girls.

Point 8 Secret archive for reports and designs. Only Soviets (six) worked in the secret archive.

Point 9 A secret typing pool in which only Soviets were employed.

Point 10 Technical library; two Soviets worked here.

Point 11 and Point 12 Department for test stand designs and experiments. Eight to ten German engineers, under the direction of Dr Scheibe and Mr Siebert, (and perhaps one Soviet engineer), were employed in this department.

Point 13 Office of the Soviet manager of the test stand department, Mr Sergejeff. (Mr Sergejeff supervised the personnel of the test stand design and experiment department.)

Point 14 I do not remember for what purpose this office was used.

Point 15 This office housed the test stand design personnel. Two Soviets and 10 Germans worked here; of these, I remember the following: Mr Pfluegl, Domhoefer, Watzke, and Glueck.

Point 16 Office of Mr Treiber and his deputy. Mr Treiber was the German chief of the test stand design department.

[redacted] 25X1A

First Floor

Point 17 Office of Mr Deinhardt, chief of the compressor department, and Mr Cordes, chief of the turbine department.

Point 18 Compressor department. [redacted] 25X1X
25X1X
the names of the following employees: (Soviet) - Mr Kutscheroff (construction deputy chief), Landa, Freydin, Frenk, and one woman. (German)- Dr Schroeder (deputy), Mr Hartleib, Schueler, Sablinsky, Rolf Kleinau, Wolf, Schneider, Adler, Schumann, Schlimper and Wieman. (Wieman was known as a collaborator and an informer for the NKVD.)

Point 19 Design office, under the direction of Mr Brandner. Various German engineers from all the departments worked in this office temporarily.

Point 20 Office of Mr Brandner, chief of the construction department.

Point 21 Miss Poell, Mr Brandner's secretary, worked in this office. She was formerly employed at Junkers/Dessau.

Point 22 Time and attendance office. A Soviet female worked here, checking work attendance.

Point 23 Office of Mr Semjonoff, a Soviet, who was Brandner's deputy.

Point 24 I do not know for what purpose this office was used.

Point 25 Turbine department. Three to four Soviets and 15-20 German engineers were employed in the turbine department. I can recall the names of the following employees: Mr Karcher, Stadlmann and Dickel. (Dickel was rumored to be a collaborator and an informer for the NKVD.)

Point 26 Design control office in which Mr Meyer and four other Germans worked.

Point 27 T L Starter department. Mr Weckwerth, chief of the department, Mr Eberl, seven Germans, and one Soviet worked here.

Point 28 Office of Mr Waldmann, chief of the combustion chamber department and later the office of Mr Gerlach.

Point 29 Combustion chamber department. Eight Germans and two Soviets were employed in this department.

Point 30 A section of the transmission department was housed in this building. Mr Bockermann, Lange and two other Germans worked here.

Point 31 I do not know for what purpose this office was used.

[redacted]

25X1A

Point 32 Typing room for the Soviets.

Point 33 The office of Dr Scheibe's secretary.

Point 34 Office of Dr Scheibe, manager of the research department.

Point 35 Transmission department. Manager Mr Elze, Haag, Dingenthal (BMW), two Germans and one Soviet worked in this department.

Point 36 Department for auxiliary equipment. Manager Meier, (perhaps spelled "Meyer"), worked here, as did approximately 15 other Germans and three or four Soviets.

Point 37 Office of Mr Singer and Mr Muecke. The latter was the German deputy to Mr Brandner, of the construction department.

Second Floor

Point 38 Design department, in which Mr Horst Schneider, Esser and two Soviets worked.

Point 39 Another section of the design department. Ten Germans and one Soviet were employed in this section. I remember Dr Heinrich (mathematics) and Mr Lorenzen (propeller).

Point 40 Office of Dr Vogts, chief of the design department.

Point 41 Testing department. Eight-ten German engineers and Mr Pohl, who was chief interpreter, worked in the testing department. Pohl wrote reports for the state test run and spoke fluent Russian, English and French.

Point 42 Office of Mr Prestel, chief of the testing department.

Point 43 Office of Mr Wagner, who was Mr Prestel's deputy; one other German also worked in this office.

Point 44 Personnel for test runs under the direction of Mr Prestel were employed here; these included Mr Geuerlich (BMW) and four other Germans.

Point 45 Another section for the personnel for test runs. Mr Groebner, Ulmitz (propeller testing) and four other Germans were employed here.

Point 46 Communist party office under the direction of one Soviet employee.

Point 47 Department of thermodynamics. Mr Kuemmel (deputy) and Mr Theo Mass worked in this office.

[redacted] 25X1A

Point 48 Thermodynamics department. Dr Schwabe was employed in this department as were Claus, Herman, and two Soviet engineers.

Point 49 Office of Dr Schulze, chief of the thermodynamics department.

Point 50 Office of Major Kwasoff, a Soviet. Kwasoff was deputy to Kusnizoff.

Point 51 Two Soviet secretaries worked in this office.

Point 52 Office of plant manager Kusnizoff (a Soviet).

Point 53 Stress and vibration department. Six Germans and two Soviets worked here.

Point 54 Office of Dr Scheinorst and Schmitt, both chiefs of the stress and vibration department.

(d) Point 4 Administration Building

This was an annex to the main assembly shop, Point 7. It was a U-shaped building of brick construction, three stories high, with a flat roof. On the upper floors were the planning sections and offices for the plant director and the general plant administration (cashiers, bookkeeping, payrolls, etc). Between 40-60 employees worked there, one shift per day. The two wings contained establishments such as barbershops, 25X1A cleaning, small repairshops, etc. The center part was directly connected with the main assembly shop by a staircase. [redacted] side this building.

(e) Point 5 Carpentry Shop

This annex was of brick construction, with a flat roof, and was one story high. The carpentry shop contained wood working machinery, band and circular saws, wood drilling and milling machines. Windows, doors and coffins were also made there. Models for casting were made in a small partitioned section of the shop; this work was primarily done by German specialists. Approximately ten workers were employed in the carpentry shop.

(f) Point 6 Test Stand for Equipment and Combustion Chambers

This building was another annex to the main building and was one story high. It contained two test stands for combustion chambers, test stands for pumps and other auxiliary equipment, and a small workshop. This test stand was enlarged in 1950 in order to permit large-scale combustion chamber experiments and compressed air production in connection with the JUMO 022 unit. At this time a high wooden fence was built in the western corner of the test stand to block the view from outside. I estimate that 15-20 workers were employed here; night shifts were very rare.

[redacted]

25X1A

(g) Point 7 Main Assembly Shop /Enclosure (C)/

The entire building was a steel structure, approximately 30x50x15 m; the roof was covered with concrete plates with a tar layer. I estimate that between 350-400 employees worked on the day shift; a much smaller number worked at night. All lathe work on the main construction parts of the JUMO 022 power plant was done here. /Enclosure (C) shows the division of the "inner hall", the arrangement of the machinery and the distribution of the side rooms./ I cannot remember the exact number of all these side rooms, nor for what they were used, (i e, control, measuring, tool rooms, craft shops, etc). I remember the following:

Point 1 Skylights

Point 2 Roof covering

Point 3 Steel structure

Point 4 Windows

Point 5 Side rooms

Point 6 Assembly of smaller parts

Point 7 Blade fabrication

Point 8 Lathes

Point 9 Automatic welding machines

Point 10 Staircase

Point 11 Main entrances

Point 12 Big lathes

Point 13 Drilling, milling and large grinding machines

Point 14 Fitting shop

Point 15 Tool and die shop

Point 16 Side entrance

(h) Point 8 Sheet Metal Workshop

A wood construction, 20x10x6 m, one story high and having a flat roof. The shop contained several lathes, shears, presses, welding and stamping machines. A varying number of workers, between 20-50 worked in this workshop. (There was only one shift per day; night work was seldom scheduled.)

[redacted] 25X1A

(i) Point 9 Heating Plant

This plant was a brick structure; it had a sheet metal smokestack, approximately 20 m high. I have never been inside this installation. It produced steam for the heating of all of the main buildings; the heat was conducted through pipes buried two-three meters underground.

(j) Point 10 Askania Section

A brick building, two stories high. The workshops were on the ground floor. I was never inside this section.

(k) Point 11 Metallurgy Building

The metallurgy building was of brick construction, two stories high and had a flat roof. A watchtower for a fire guard was built onto the roof; guards were stationed at this tower day and night.

(l) Point 12 Entrance and Guard House

A wooden building, 15x8x5 m, one story high and which had a flat roof. During the day, approximately 20 guards were on duty throughout the entire plant. One commandant and four guards were always stationed in the guard house.

(m) Point 13 Compressor Test Stand

A stuccoed brick construction, 4x5x4 m, which had a flat roof. Two radial blowers were installed outside the building, as were two electromotors, of approximately 50 KW.

(n) Point 14 Storehouse

A wooden structure, 6x12x4 m, which was one story high. I do not know what type of material was stored here.

(o) Point 15 Prison

The prison was a wooden barrack.

(p) Point 16 Storehouses

Point 17 Each building was constructed of wood, 6x20x4 m, one story high and had a flat roof. Raw materials,
Point 18 turbine disks, etc were stored in these storehouses. I have never been inside any of them.

(q) Point 19 Ambulance

This building, made of wood, 8x12x4 m, was one story high and had a gabled, shingled roof. The dispensary and dental clinic for the plant were housed at this point.

[redacted] 25X1A

(r) Point 20 Unknown Building

This building was approximately 8x12x4 m; I do not know for what purpose it was used.

(s) Point 21 Electro-Motor Repairshop

A wooden construction; the size was approximately 5x8x4 m.

(t) Point 22 Repair Shop

A wooden construction, 5x8x4 m.

(u) Point 23 Fence

The boards were usually two and a half meters high; in some places they were four meters high. (The total fenced plant area was approximately 400x180 meters.)

(v) Point 24 Watchtowers

The watchtowers were wooden platforms, which were approximately four meters above the ground.

(w) Point 25 Gasoline Storage Tank

This storage tank had a pipeline leading underground to the test stand, point 2.

(x) Point 26 Small Repair Shop

Measuring instruments were checked in this repair shop.

(y) Point 27 Fire Station

The fire station was equipped with one fire truck; this station was constructed of wood and was one story high.

(z) Point 28 Air Compressor Station

The air compressor station was a wooden building, 5x8x4 m; the roof was of the gabled-type and was covered with sheet metal in 1950.

(aa) Point 29 The Annealing Building

(bb) Point 30 Forge

25X1A [redacted] in addition to the hardening furnaces, two pneumatic hammers and several friction presses, (of which only one was in operation), were installed here.

2. Operational Data

25X1A [redacted] the source of raw materials or of the quantities of the raw materials which were used at Zavod #2. All transporting and supply was done by truck. The electric power was directed from Kuibyshev by high voltage transmission

[redacted] 25X1A

lines on wooden towers. ([redacted] the transformer 25X1A station was located.) The railroad nearest Uprawlentschesky was at Kuibyshev. The main roads within the plant were of 25X1A gravel with asphalt or concrete surface and were usually six-eight meters wide. The machinery was generally kept in good condition. [redacted] particular shortage of materials.

3. Labor Force

25X1A [redacted] 1000-1600 Soviets were employed at Zavod #2. Approximately 750 German specialists (this total includes about 200 of the Askania group) worked at the plant. The average salary paid the Germans ranged between Rubles 2000-4000 per month. The German personnel worked six days per week (48 hours) and were allowed 24 working days per year vacation. (All German specialists chose to remain in Uprawlentschesky during their vacations despite the theoretical possibility of receiving permission to travel within the USSR.) The Soviet employees were paid a much lower wage than were the Germans. Occasional night shifts were worked in only a few installations.

4. Security Measures

(a) The Soviet administration used various methods to protect the work in ZAVOD #2 against sabotage or unauthorized entry. There were official security measures, such as guards, the plant secret service, and the individual obligation to secrecy. There was also the secret control of every individual through a widespread espionage system, in which some of the Germans were used.

(b) The official security measures were under the general direction of Major Kolitschenko, who was the immediate supervisor of the plant commandant. Kolitschenko was the NKVD member who appeared publicly. The secret control consisted of certain persons who answered specific questions in writing and had to forward these reports at specified times to an agency. This latter measure, after it became known, was undoubtedly the most effective, because it created the feeling of suspicion against every "comrade".

(c) Zavod #2 had a factory guard force under the plant commandant, Paschanoff. This force manned the outer watch-towers day and night, furnished the guards for the plant entrance, and furnished guards for other particularly important parts of the plant, such as the test stands, the construction office, etc. Every worker had an identification card, which he received on entering the plant. The number of the identification card had to be given to the guards stationed just inside the entrance, upon which the guards would issue the proper identification card. Later on the guards gave the identification cards on the basis of personal recognition. Upon leaving the plant, the identification cards had to be returned to the guard. From the winter of 1949-50 on, the identification cards were exchanged at each work place for a pass which was valid only for that particular working place. Special card-holders were installed for this purpose; they were locked by the attendance checker at the beginning of the working day, and were opened only at the beginning of lunch hour and at the end of the workday.

[redacted] 25X1A

(d) The identification card was a folded piece of cardboard, covered with linen, and contained a photograph of the employee, the employee's identification number on both pages, the name of the employee, and an additional stamp for each different working place. The pass for the working place was a smooth single piece of cardboard with photograph, name, identification number, and a stamp. As far as I remember, the identification cards were renewed every year.

(e) Special passes were necessary for the Construction Office building. Shop specialists and operational engineers were not admitted, with very rare exceptions. The pass had to be shown to the guard at the entrance to the building, without the guard asking for it. The Soviet plant manager and all other Soviet personnel had to follow the same procedure. Whenever another plant employee without the special pass for the Construction Office had to see a specialist there, the specialist was called out of the building by the guard. Employees of the Construction Office had entry to all shops except the main assembly hall, the test stands, the buildings for the Askania group, and the buildings for the inspection of materials; special passes were needed for these places.

(f) All working data in the Construction Office, reports and designs, etc, were divided into secret and non-secret classifications. All data marked secret were kept in a separate archive, and were given out only against a receipt; they had to be returned during the lunch hour and at the end of working hours. All reports and designs which revealed measurements or specific data concerning Projects A, B, and C were classified and searches of employees leaving the plant were made at irregular intervals.

(g) The engine test stands were surrounded by special fences within the plant. The outer plant fence was at least four meters high, so that the turboprop propellers could not be seen from the street. A guard was stationed at the entrance to the fenced-in test stand area; he stopped everybody and closely checked his pass and special stamp. There was no control in the test stand building itself.

(h) For special tests, such as the State Test run, the assembly crew and the test stand workers were selected by name, and their identification cards were stamped with a special permit. The assembly of the engine, and any necessary reassembly or repair, was done under the supervision of the State Test run commission. Guards on the test stand were reinforced; however, the routine testing of other engines 25X1A continued, but the entrance and exit to the test stand were heavily guarded. When the single wheel test stand was completed in 1950, [redacted]
The tests themselves were conducted by Mr Wiemann. At this time [redacted] 25X1A where, in the first section, the single wheel test stand was constructed. The German management made application to the plant guard force for my pass, and secured a recommendation 25X1A from the Soviet chief engineer. Inadvertently, the 25X1A application was submitted during the State Test run. As a result, [redacted]

[redacted]

25X1A

(i) In test operations, accidents are bound to happen in almost any development. Immediately, the word "sabotage" is used because it is one of the most common words in the Soviet vocabulary. In all the [redacted] 25X1A
so much on the success of their work that none of them thought of such an act. Once Mr Keummel summarized our experience in the USSR in the following way: "Every change means a reprimand". To prevent accidental damage to the JUMO 022 unit, the blow-off air shafts, two tubes 100 mm in diameter, were equipped with mechanical filters. No other protective measures were known to me.

-end-

ENCLOSURES: (A) Zavod #2

Page 1 - Layout

(B) Design and Construction Office

(C) Main Assembly Shop

[redacted]

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LEGEND

POINT 1: NEW TEST STAND BUILDING Started in 1946; still not operating in 1950.
POINT 2: TEMPORARY TEST STAND Built in 1946
POINT 3: DESIGN OFFICE
POINT 4: ADMINISTRATION BUILDING, WORK PLANNING, PLANT MANAGER
POINT 5: CARPENTRY SHOP
POINT 6: TEST STANDS FOR EQUIPMENT (pumps, etc) AND COMBUSTION CHAMBERS
POINT 7: MAIN ASSEMBLY SHOP
POINT 8: SHEET METAL WORKSHOP
POINT 9: HEATING PLANT
POINT 10: ASKANIA SECTION
POINT 11: METALLURGY BUILDING
POINT 12: ENTRANCE AND GUARD HOUSE
POINT 13: COMPRESSOR TEST STAND
POINT 14: STOREHOUSE
POINT 15: PRISON
POINT 16: STOREHOUSE
POINT 17: STOREHOUSE
POINT 18: STOREHOUSE
POINT 19: AMBULANCE GARAGE
POINT 20: UNKNOWN
POINT 21: ELECTRO-MOTOR REPAIR SHOP
POINT 22: REPAIR SHOP BUILDING
POINT 23: FENCE
POINT 24: WATCHTOWERS
POINT 25: GASOLINE STORAGE TANK
POINT 26: SMALL REPAIR SHOP - CHECKING OF MEASURING INSTRUMENTS
POINT 27: FIRE STATION - ONE VEHICLE
POINT 28: AIR COMPRESSOR
POINT 29: ANNEALING BUILDING
POINT 30: FORGE

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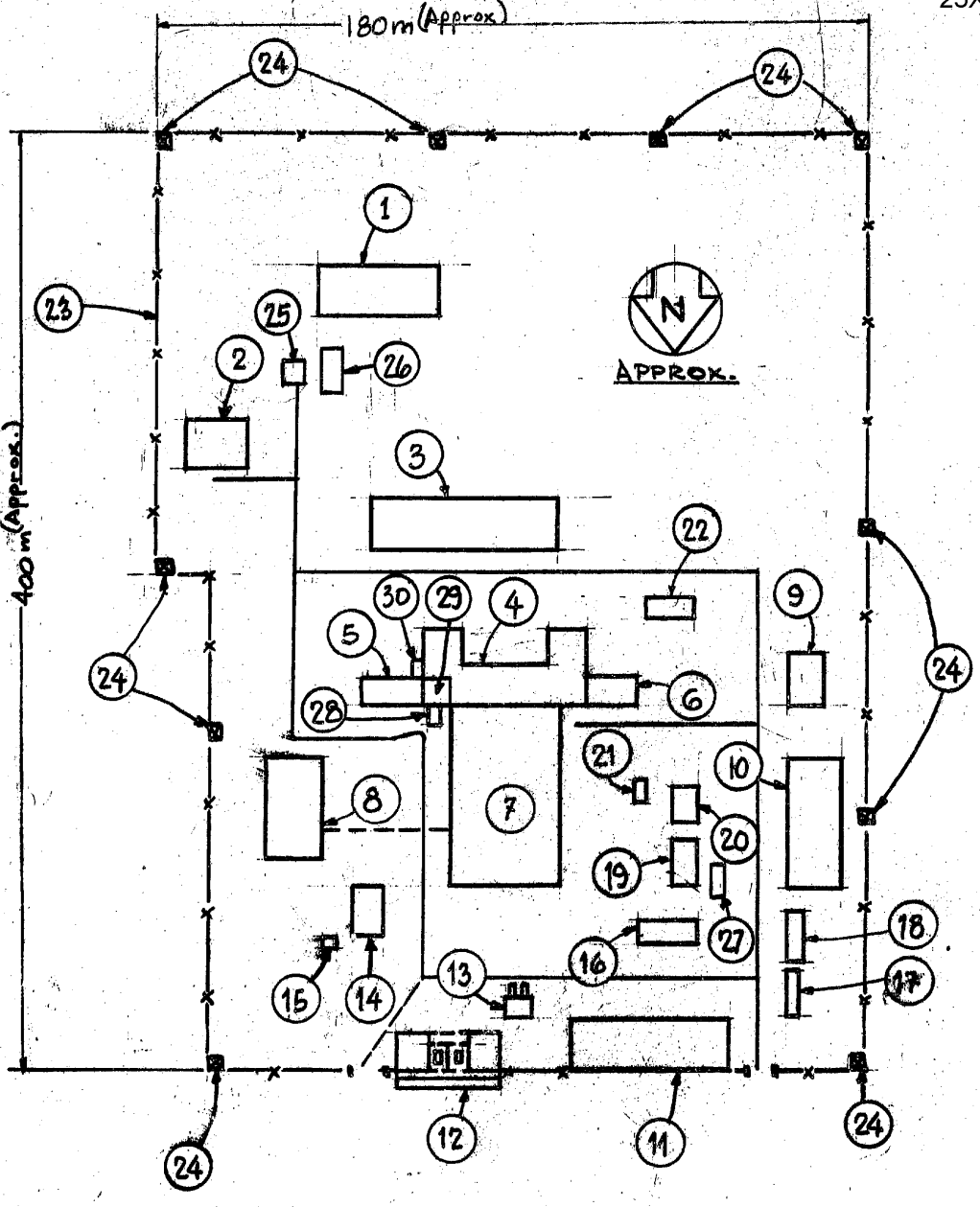

ZAVOD #2

Layout

ENCLOSURE (A)
Page 1
of 2 pages.

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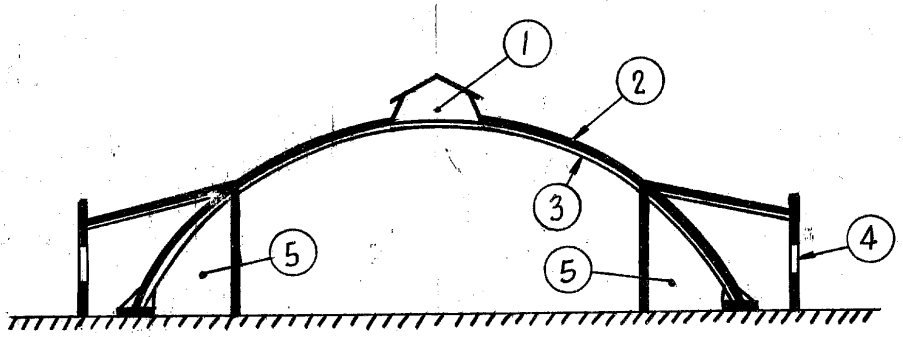
SECURITY INFORMATION

[redacted]

Main Assembly Shop

25X1A



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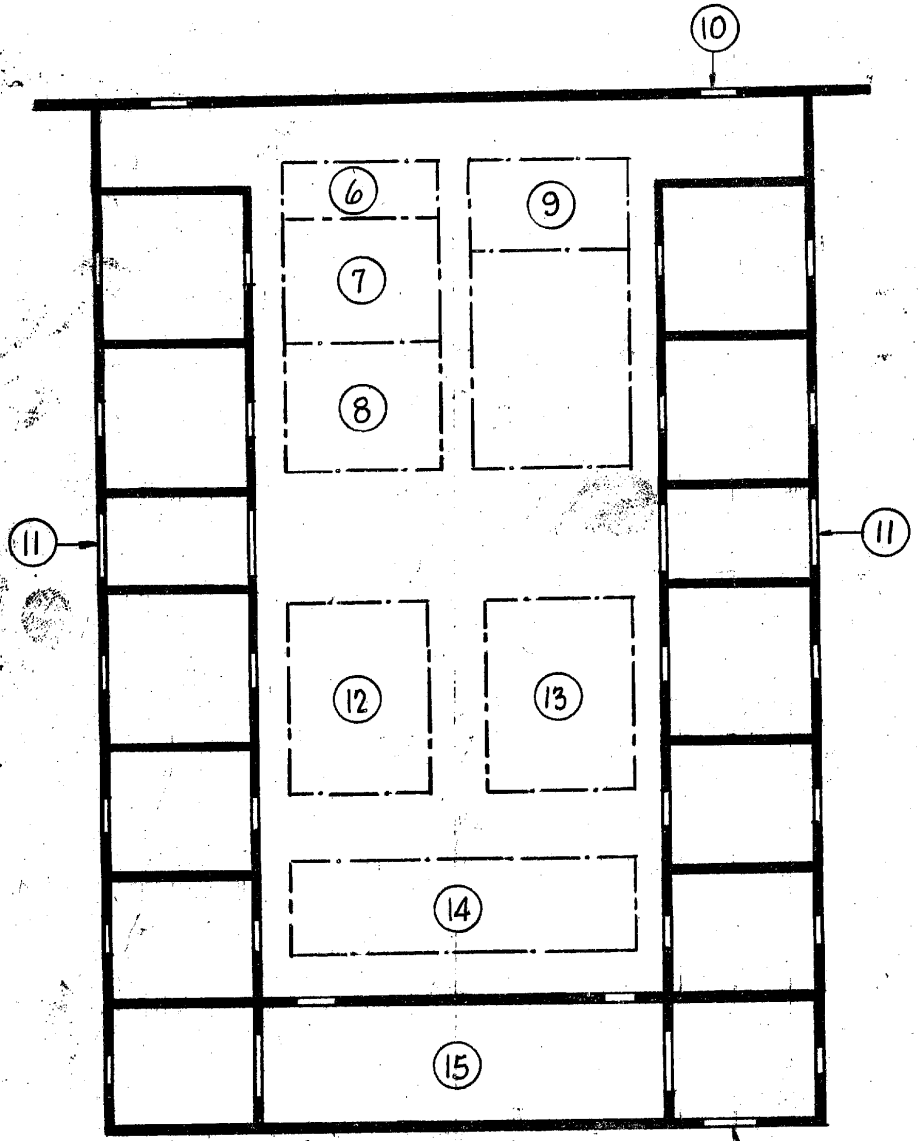

PLAN VIEW

ENCLOSURE (C)

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SECURITY INFORMATION

[redacted]

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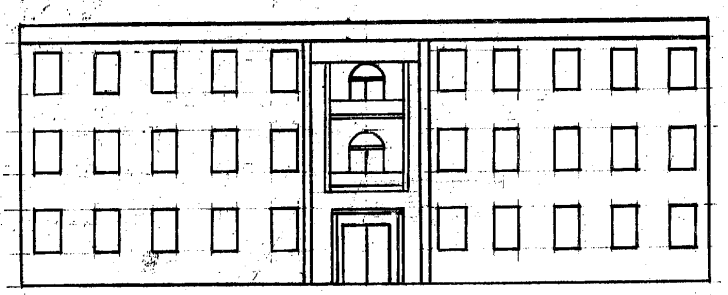
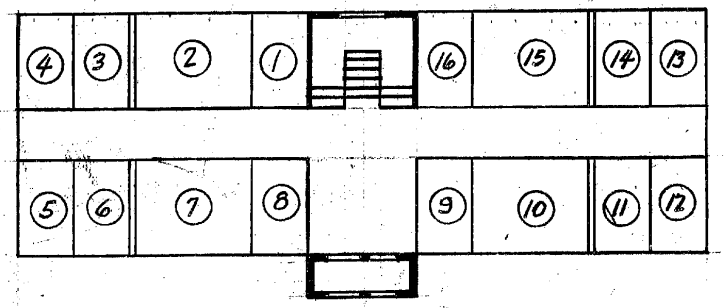
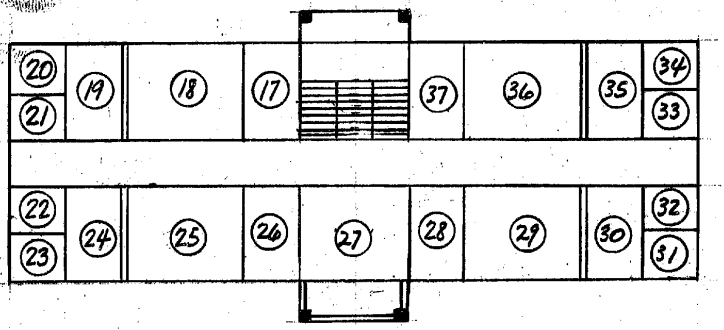


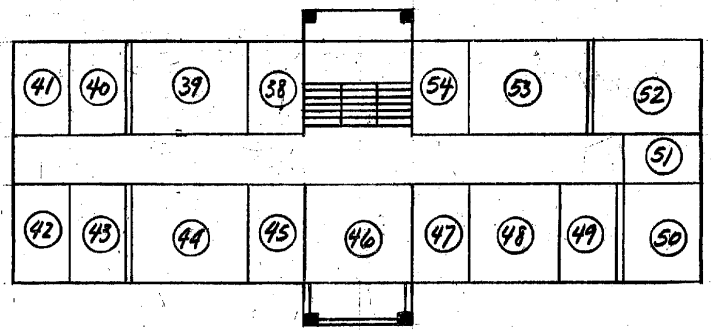
FRONT ELEVATION



GROUND FLOOR



FIRST FLOOR



SECOND FLOOR

DESIGN AND
CONSTRUCTION OFFICE

ENCLOSURE (B)

SECRET